

### **REMARKS**

Claims 1-32 are pending in the present Application. Claims 9, 11, 21, 23, and 27 have been withdrawn, and claims 1, 5, 28 and 32 have been amended, leaving Claims 1-8, 10, 12-20, 22, 24-26 and 28-32 for consideration upon entry of the present Amendment. The Specification has been amended to correct certain typographical errors, as explained in detail below.

Claims 1 and 5 have been amended to correct typographical errors.

Claims 1, 28 and 32 have been amended to better define the invention. Support for these amendments can be found at least at paragraphs [0010] and [0030], and throughout the specification.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

#### **Interview Summary**

Applicants acknowledge the Examiner-Initiated telephonic interview conducted on July 2, 2008. As noted in the Examiner-Initiated Interview Summary, the substance of the interview was as follows: Examiner Wollschlager contacted Applicant's representative, Pat DeSimone regarding claim 21. The Examiner suggested that claim 21 appears to read on unelected species H. Applicant's representative agreed. Accordingly, claim 21 has been withdrawn from further consideration as being directed to unelected species H.

#### **Claim Objections**

Claim 1 is objected because at line 7 the claim recites "pressure is at a applied temperature." Claim 1 has been amended to recite "pressure is applied at a temperature."

Claims 5 is objected to because the word "centimeter" is misspelled at line 2 of the claim. Claim 5 has been amended to correct this typographical error.

Applicants respectfully request a withdrawal of the objections and allowance of the claims.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1-4, 15, 22, 24, 26 and 32 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by JP 2000-167827 to Yamamoto, et al. (Yamamoto). Office Action dated 7/10/2008, page 2) Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Variant Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

Independent claim 1 recites

1. A method for compression molding of poly(arylene ether) powder, comprising:

introducing a powder comprising unheated poly(arylene ether) powder to compaction equipment comprising a compression mold, wherein the poly(arylene ether) has an intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C; and

subjecting the powder in the compression mold to a pressure sufficient to produce an article having a density greater than the unheated poly(arylene ether) powder and having a compressive strength of greater than or equal to about 5 kg, wherein said pressure is applied at a temperature less than the glass transition temperature of the poly(arylene ether) powder.

Independent claim 32 recites:

32. (Original) A method for compression molding of poly(arylene ether) powder, comprising:

introducing an unheated poly(arylene ether) powder to compaction equipment comprising a compression mold, wherein the poly(arylene ether) has an intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C;

subjecting the unheated poly(arylene ether) powder in the compression mold to a pressure sufficient to produce an article having a density greater than the unheated poly(arylene ether) powder and having a compressive strength of greater than or equal to about 5 kg, wherein said pressure is applied at a temperature less than the glass transition temperature of the poly(arylene ether).

Yamamoto is generally directed to manufacturing a polyphenylene ether tablet by compression molding. (Abstract) More specifically, Yamamoto teaches compression molding polyphenylene ether powder resin within the pressure range of 0.1-5.0 tons/cm<sup>2</sup> to obtain a tablet with the density of 0.7-1.5. (Abstract) According to the Abstract, the polyphenylene ether resin is heated to 70°C - 200°C prior to compression-molding. More specifically, Examples 1 to 3 disclose a method of manufacturing a polyphenylene ether tablet by compression molding, the method comprising introducing polyphenylene ether having an intrinsic viscosity of 0.53, as measured in chloroform at 30°C, wherein the

polyphenylene ether powder and the mold were preheated to 115°C; and a pressure of 1 ton/cm<sup>2</sup>; 2 tons/cm<sup>2</sup>; or 3 tons/cm<sup>2</sup> was applied to the compression machine ([0023]).

Thus, as noted by the Examiner, the Examples provided by Yamamoto exemplify feeding preheated powder into a preheated mold ([0023]). (Office Action dated 7/10/2008, page 8)

In addition, Yamamoto further discloses Comparative Example 1, in which polyphenylene ether tablet was prepared as in Example 1, except that the polyphenylene ether powder and the mold were not heated, and were left at room temperature (25°C) ([0027]). The compressed polyphenylene ether tablet prepared according to Comparative Example 1 had a compression strength of only 3.18 kg, and separation and cracking were observed on the surface of the molded pieces ([0027]). Thus, the method of compression molding unheated poly(arylene ether) powder disclosed by Yamamoto does not subject the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg.** Further, as noted in reference to Examples 1 to 3, Yamamoto does not teach a method for compression molding poly(arylene ether), wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C.**

After review of Yamamoto, specifically Examples 1-3 and Comparative Example 1, Applicants respectfully assert that Yamamoto does not teach a method for compression molding of poly(arylene ether) comprising introducing a powder comprising unheated poly(arylene ether) powder (or introducing an unheated poly(arylene ether) powder) into compaction equipment comprising a compression mold, wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C** and subjecting the (powder comprising unheated poly(arylene ether) powder (or the unheated poly(arylene ether) powder) in the compression mold to a pressure sufficient **to produce an article having a compressive strength of greater than or equal to about 5 kg,** wherein said pressure is applied at a temperature less than the glass transition temperature of the poly(arylene ether).

In summary, since Yamamoto does not teach a method for compression molding of poly(arylene ether), which utilizes poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C,** or subjects the (powder comprising unheated poly(arylene ether) powder (or the unheated poly(arylene ether)

powder) in the compression mold to a pressure sufficient to **produce an article having a compressive strength of greater than or equal to about 5 kg**, Yamamoto does not teach all elements of the claimed invention. Since Yamamoto fails to teach all elements of the claimed invention, this reference cannot anticipate the claims under § 102(b). Applicants respectfully request reconsideration and withdrawal of the rejection.

Claims 1, 8, 10, 12-15, 25, 26, 28, and 32 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by WO2002/094529 to Umetsu, et al. (Umetsu). (Office Action dated 7/10/2008, page 4) Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Variant Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

Umetsu is generally directed to tablets of thermoplastic resin and filler obtained by compression molding thermoplastic resin powder and filler into tablets or melt-kneading thermoplastic resin and filler followed by compression molding the powder of the resulting composition into tablets. (Abstract) According to Umetsu, for the compressed tablet, thermoplastic resin accounts for 1 to 40% by volume and the filler accounts for 60 to 99% by volume, based on the volume of the tablet. ([0044], claim 14) The compressed tablet may further comprise a substance (X) that changes from solid into liquid or vapor at a temperature between 25 and 250°C. ([0046], [0118], claim 20). Paragraph [0115] discloses the method for preparing Examples 1-12. Paragraph [0115] states that the tablets are press molded into tabular moldings of 150 mm x 150 mm x 2 mm thickness each, wherein the molding is conducted at temperature according to Table 1, and the pressure of 5 MPa. According to Table 1, the resin temperature during molding was 290-350°C, and the mold temperature during molding was 90-150°C. (Table 1)

In making the rejection, the Examiner points to paragraphs [0072], [0115], and claim 24 for teaching “tableting the thermoplastic powder and filler at room temperature.” (Office Action dated 7/10/2008, page 4) Applicants respectfully disagree. Applicants respectfully point out that Umetsu does not teach compression molding of poly(arylene ether) powder at room temperature. The only reference to room temperature (i.e., 25°C) in Umetsu refers to substance (X), which Umetsu defines as a substance that changes from solid into liquid or vapor at a temperature between 25 and 250°C. Umetsu simply does not teach compression molding of poly(arylene ether) powder at room temperature.



Further, independent claims 1 and 32 require “introducing a powder comprising **unheated** poly(arylene ether) powder to compaction equipment.” In contrast, Table 1 of Umetsu clearly teaches the resin temperature during molding was 290-350°C. Thus, Umetsu does not teach a method for compression molding of poly(arylene ether) comprising introducing **unheated** poly(arylene ether) powder.

Furthermore, Applicants respectfully submit that the resin temperature disclosed by Umetsu during molding (e.g., 290-350°C) is well above the glass transition temperature of the poly(arylene ether) powder. Applicants respectfully assert that the glass transition temperature of poly(arylene ether) is generally below 290-350° C, which is the temperature of the resin during compression molding described by Umetsu. For example, the Examiner cites US 4,492,805 to Bersecke et al. for teaching that the glass transition temperature of poly(arylene ethers) ranges from 100°C to 300°C (col. 5, lines 5-10) and US 6,194,518 to Singh et al. for teaching polyphenylene ether has a glass transition temperature of around 210°C (col. 4, line 58). (Office Action dated 7/10/2008, page 13) Since Umetsu teaches the resin temperature during molding was 290-350°C, Umetsu does not teach “subjecting the powder in the compression mold to a pressure sufficient to produce an article having a density greater than the unheated poly(arylene ether) powder **wherein said pressure is applied at a temperature less than the glass transition temperature of the poly(arylene ether) powder,**” as required by claims 1 and 32.

In summary, Applicants believe that Umetsu does not teach a method as presently claimed. Specifically Umetsu does not teach a method for compression molding of poly(arylene ether) comprising introducing **unheated** poly(arylene ether) powder, and wherein said pressure is applied at **a temperature less than the glass transition temperature of the poly(arylene ether) powder.** For this reason at least, Applicants believe that Umetsu fails to teach all elements of the claimed invention. Applicants respectfully request reconsideration and withdrawal of the rejection.

Claims 28 and 30 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by United States Patent No. 3,356,761 to Fox. (Office Action dated 7/10/2008, page 6) Applicants respectfully traverse this rejection.

As currently amended, independent claim 28 recites

28. A method for compression molding of poly(arylene ether) powder to produce an article, comprising:

introducing a mixture consisting essentially of a binder and poly(arylene ether) powder to compaction equipment comprising a compression mold;

subjecting the mixture in the compression mold to a pressure sufficient to form an article having a density greater than the poly(arylene ether) powder wherein said pressure is applied at a temperature less than the glass transition temperature of the poly(arylene ether).

(emphasis added)

Claim 28 uses the phrase “consisting essentially of” with regard to the method for compression molding of poly(arylene ether) powder to produce an article. It is well established that the phrase “consisting essentially of” excludes components which would change the basic nature of the composition. Specifically, the phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. (MPEP §2111.03)

Fox is generally directed to compositions consisting of poly(arylene ether), a liquid polymerizable vinyl unsaturated material and a cross-linking material. (Abstract) Examples 1-3 of Fox disclose a method comprising blending poly-(2,6-dimethyl-1,4-phenylene)ether powder and styrene monomer on a rubber mill; adding dicumyl peroxide and blending; placing the resulting powder between sheets of Mylar and pressing for various periods of time and temperature to heat cure the composite. (Col. 4, lines 1-43) Thus, unlike the claimed invention, the methods disclosed by Fox comprise an additional component, a cross-linking material, and an addition step, heat curing. Applicants respectfully assert that both the additional component, and additional method step materially affect the basic and novel characteristics of the claimed invention. Specifically, the composition/method disclosed by Fox introduces additional cross-linking between molecules and additional branching which materially affects the rigidity and flow properties of the thermoplastic composition. For this reason at least, Applicants believe that Fox does not anticipate the claims 28 and 30. Applicants respectfully request reconsideration and withdrawal of the rejection.

#### Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-4, 15-20, 22, 24, and 26 stand rejected under 35 U.S.C. § 103(a), as

allegedly unpatentable over Yamamoto in view of United States Patent No.'s 5,767,426 to Oliver, et al. (Oliver) and 5,147,722 to Koslow. Applicants respectfully traverse this rejection.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, or knowledge generally available in the art at the time of the invention, must provide some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). "A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). To find obviousness, the Examiner must "identify a reason that would have prompted a person of ordinary skill in the art in the relevant field to combine the elements in the way the claimed new invention does." *Id.*

Yamamoto is generally directed to manufacturing a polyphenylene ether tablet by compression molding. (Abstract) As discussed in detail above, Applicants believe that Yamamoto fails to teach a method of compression molding unheated poly(arylene ether) powder, wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C**. Further, Yamamoto fails to teach the method of compression molding unheated poly(arylene ether) powder comprising subjecting the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**. The combination of Oliver and Koslow does not make up for these deficiencies.

Oliver is cited for teaching that in compression molding powder based compositions the resins can be preheated or the mold/die can be preheated or any combination of heating can be employed. (Office Action dated 7/10/2008, page 8) Oliver is generally directed to iron-based powder compositions comprising an admixture of iron-based particles and particles of an insulating thermoplastic material further formulated with a particulate fluorine resin. (Abstract; Col. 1, lines 11-13) Oliver discloses polyphenylene ethers as exemplary thermoplastic resins suitable for iron-based powder compositions. (Col. 5, lines 17-20) However, Oliver does not disclose a method of compression molding unheated poly(arylene ether) powder, wherein the poly(arylene ether) has an **intrinsic**

**viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C.** Nor does Oliver teach a method of compression molding unheated poly(arylene ether) powder comprising subjecting the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg.**

Applicants further maintain that the Examiner has used an improper standard in arriving at the rejection of the above claims under section 103, based on improper hindsight, which fails to consider the totality of applicant's invention and to the totality of the cited references. More specifically the Examiner has used Applicant's disclosure to select portions of the cited references to allegedly arrive at Applicant's invention. In doing so, the Examiner has failed to consider the teachings of the references or Applicant's invention as a whole in contravention of section 103, including the disclosures of the references, which teach away from Applicant's invention.

Applicants respectfully submit that Oliver teaches away from "subjecting the powder in the compression mold to a pressure sufficient to produce an article having a density greater than the unheated poly(arylene ether) powder wherein said pressure is applied at a temperature less than the glass transition temperature of the poly(arylene ether) powder." Oliver is generally directed to iron-based powder compositions comprising an admixture of iron-based particles, a thermoplastic material, and a fluorine resin. In discussing the compaction of the iron-based powder, Oliver states:

The iron-based compositions of the invention can be formed into magnetic core components using appropriate molding or compressing techniques. Preferred is compression molding, in which the powder composition is charged into a die and **heated to a temperature above the glass transition temperature of the thermoplastic material** before compaction. The composition can be heated before introducing it into the die, or the die can be preheated before receiving the composition. A combination of these steps can also be used. It is preferred that **the composition be at a temperature about 25 ° - 85 °C. above the glass transition temperature of the thermoplastic material** before compaction.

(Col. 7, lines 55-67, emphasis added) Thus, Applicants respectfully submit that the Examiner failed to consider the text at column 7, lines 61-64, cited for teaching that in compression molding powder based compositions the resins can be preheated or the mold/die can be preheated or any combination of heating can be employed, in its proper context. (Office Action dated 7/10/2008, page 8)



Further, in teaching “the powder composition is charged into a die and **heated to a temperature above the glass transition temperature of the thermoplastic material**”, Oliver clearly teaches away from “subjecting the powder in the compression mold to a pressure sufficient to produce an article having a density greater than the unheated poly(arylene ether) powder **wherein said pressure is applied at a temperature less than the glass transition temperature of the poly(arylene ether) powder,**” as required by the claimed invention.

In summary, Oliver does not disclose a method of compression molding unheated poly(arylene ether) powder wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C**, and subjecting the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**. Further, Applicants respectfully assert that one of skill in the art would not have been motivated to combine the method of compression-molding polyphenylene ether resin of Yamamoto with the method of compacting iron-based powder compositions disclosed by Oliver.

Koslow is cited for teaching that in compression molding powder based compositions the exact procedure can be determined based on the sized and shape of the product and can include pouring the powder into a heated mold or heating the mold again after the powder has been added. (Office Action dated 7/10/2008, page 8) Koslow is directed to methods of forming a composite material composed of primary particles, a binder resin phase forming a continuous web matrix or point bonds, and a volume of empty pores. (Abstract) The binder resin phase can be converted to microfine fibers by the application of applied shear. (Col. 4, lines 41-44) Prior to such conversion, the binder is in the form of a thin, substantially continuous film or web (i.e., continuous web matrix or CWM). (Col. 4, lines 44-47) Further, the process for forming a continuous web matrix or point bonds comprises mixing the binder, usually a thermoplastic resin, with one or more types of primary particles or one or more primary fibers. (Col. 11, lines 20-25)

Koslow teaches that when compression molding the CWM powder, i.e., the mixture of the binder and the primary particles, the parameters can be adjusted based on the size and shape of the powder composition. (Col. 18, lines 56 – Col. 19, line 6) However, Koslow does not disclose a method of compression molding unheated poly(arylene ether) powder. More specifically, Koslow does not disclose a method of

compression molding unheated poly(arylene ether) powder wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C**. Further, Koslow fails to teach the method of compression molding unheated poly(arylene ether) powder comprising subjecting the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**.

In summary, neither Oliver, nor Koslow teach or suggest disclose a method of compression molding unheated poly(arylene ether) powder wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C**, and subjecting the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**. For these reasons at least, the combination of Oliver and Koslow does not make up for the deficiencies of Yamamoto. Therefore, the proposed combination of Yamamoto, in view of Oliver and Koslow fails to teach all elements of the claimed invention. Further, Applicants respectfully assert that one of skill in the art would not have been motivated to combine the method of compression-molding polyphenylene ether resin of Yamamoto with the method of compacting iron-based powder compositions disclosed by Oliver. Since, the proposed combination fails to teach all elements of the claimed invention, and further since one of skill in the art would not have been motivated to combine the method of Yamamoto with the method of Oliver, Applicants believe that a *prima facie* case of obviousness has not been made. Applicants respectfully request reconsideration and withdrawal of the rejection.

Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Yamamoto in view of Oliver and Koslow as applied to claims 1-4, 5-20, 22, 24, and 26 and further in view Modern Plastics Handbook ("the Handbook"). (Office Action dated 7/10/2008, page 10) Applicants respectfully traverse this rejection.

As discussed above, Applicants believe that the combination of Yamamoto in view of Oliver and Koslow fails to teach all elements of independent claim 1. Specifically, the combination fails to teach a method of compression molding unheated poly(arylene ether) powder, wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C** or subjecting the poly(arylene ether)

**powder to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg.**

The Handbook does not make up for these deficiencies. The Handbook is cited for teaching the overall cycle times required for compression molding is determined based upon the molding material, the thickness/size of the part to be produced and the mold temperature. (Office Action dated 7/10/2008, page 10) As initial matter, Applicants note that the Handbook does not specifically address method for compression molding of poly(arylene ether) powder. More specifically, the Handbook does not teach method for compression molding of poly(arylene ether) powder, consisting of “introducing a powder comprising **unheated** poly(arylene ether) powder to compaction equipment.” Since the Handbook does not teach a method for compression molding of poly(arylene ether) powder, Applicants respectfully submit that the Handbook cannot teach or suggest a method of compression molding unheated poly(arylene ether) powder, wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C**. Further, the Handbook fails to teach the method of compression molding unheated poly(arylene ether) powder comprising subjecting the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**, as presently claimed. Therefore, the combination of Yamamoto in view of Oliver and Koslow, in further view of the Handbook fails to teach all elements of the claimed invention. In summary, since the combination of Yamamoto, Oliver, Koslow and the Handbook fails to teach all elements of the claimed invention, Applicants believe that a *prima facie* case of obviousness has not been made. Applicants respectfully request reconsideration and withdrawal of the rejection.

Claim 7 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Yamamoto in view of Oliver and Koslow as applied to claims 1-4, 5-20, 22, 24, and 26 and further in view the Handbook and further in view United States Patent No. 5,294,667 to Weiss, et al. (Weiss). (Office Action dated 7/10/2008, page 11) Applicants respectfully traverse this rejection.

As discussed above, Applicants believe that the combination of Yamamoto in view of Oliver, Koslow and the Handbook fails to teach all elements of independent claim 1.

Specifically, the combination fails to teach a method of compression molding unheated poly(arylene ether) powder, wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C** or subjecting the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**. Weiss fails to make up for these deficiencies.

Weiss is cited for teaching that compaction/compression molding of polyphenylene ether removes the air contained in the interstices of the loose powder which in turn reduces the proportion of fines and the risk of dust explosions (Col. 2, lines 55-67). (Office Action dated 7/10/2008, page 11) In particular, Weiss teaches that the compaction and/or sintering takes place under pressure and if necessary with heating, preferably under a pressure corresponding to a nip pressure of from 1 to 100 kn/cm, in particular from 5 to 50 kn/cm, and at from about 10°C to about 150°C preferably from 20°C to 50°C. (Col. 2, lines 14-19) Weiss is not directed to method for compression molding of poly(arylene ether). Therefore, Applicants believe that Weiss is not informative regarding the temperature of the poly(arylene ether) prior to compression, and is not informative regarding the temperature poly(arylene ether) during compression. Further, since the Weiss does not teach a method for compression molding of poly(arylene ether) powder, Applicants respectfully submit that the Weiss cannot teach or suggest a method of compression molding unheated poly(arylene ether) powder, wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C**. Further, Weiss fails to teach the method of compression molding unheated poly(arylene ether) powder comprising subjecting the poly(arylene ether) powder **to a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**, as presently claimed. Therefore, the combination of Yamamoto in view of Oliver and Koslow, in further view of the Handbook, and in further view of Weiss fails to teach all elements of the claimed invention.

In summary, since the combination of Yamamoto, Oliver, Koslow, Handbook and Weiss fails to teach all elements of the claimed invention, Applicants believe that a *prima facie* case of obviousness has not been made. Applicants respectfully request reconsideration and withdrawal of the rejection.



Claim 29 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Umetsu as applied to claims 1, 8, 10, 12-15, 25, 26, 28, and 32 and further in view of United States Publication No. 2002/0198123 to Nitzsche, et al. (Nitzsche). (Office Action dated 7/10/2008, page 12) Applicants respectfully traverse this rejection.

As noted above, Applicants believe Umetsu does not teach a method for compression molding of poly(arylene ether) comprising introducing **unheated** poly(arylene ether) powder, and wherein said pressure is applied at **a temperature less than the glass transition temperature of the poly(arylene ether) powder**. In making the rejection, the Examiner stated that Nitzsche does not explicitly disclose heating the binder prior to blending with the thermoplastic resin. (Office Action dated 7/10/2008, page 12) Nitzsche is cited for teaching a method of forming a composition that includes fillers, wax binders, foaming agents and liquids that are heated and then pelletized to form a composition that is subsequently blended with a thermoplastic resin ([0014]-[0017], and [0029]-[0031]). (Office Action dated 7/10/2008, page 12) Nitzsche is generally directed to a composition comprising a blowing agent which decomposes and evolves gases thereby causing the polymeric material to foam ([0002]). Nitzsche is not directed to method for compression molding of poly(arylene ether). Therefore, Applicants believe that Nitzsche is not informative regarding the temperature of the poly(arylene ether) prior to compression, and is not informative regarding the temperature of the poly(arylene ether) during compression. Since, Nitzsche does not teach or suggest the temperature of the poly(arylene ether) prior to compression, and is not informative regarding the temperature poly(arylene ether) during compression it cannot make up for the deficiencies of Umetsu. Therefore, Applicants respectfully assert that the combination of Umetsu and Nitzsche fails teach or suggest a method for compression molding of poly(arylene ether) using poly(arylene ether) powder, and wherein said pressure is applied at **a temperature less than the glass transition temperature of the poly(arylene ether) powder**. For this reason at least, Applicants believe that a *prima facie* case of obviousness has not been made. Applicants respectfully request reconsideration and withdrawal of the rejection.

Claim 31 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Umetsu as applied to claims 1, 8, 10, 12-15, 25, 26, 28, and 32 and further in view of Yamamoto. (Office Action dated 7/10/2008, page 13) Applicants respectfully traverse

this rejection.

As discussed in detail above, Applicants respectfully assert Umetsu does not teach a method for compression molding of poly(arylene ether) comprising introducing **unheated** poly(arylene ether) powder, and wherein said pressure is applied at **a temperature less than the glass transition temperature of the poly(arylene ether) powder**. Nor does Umetsu disclose a method of compression molding unheated poly(arylene ether) powder wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C**, or comprising subjecting the poly(arylene ether) powder to **a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**.

Further, and as discussed in detail above, the method of compression molding unheated poly(arylene ether) powder disclosed by Yamamoto does not subject the poly(arylene ether) powder to **a pressure sufficient to produce an article having a compressive strength of greater than or equal to about 5 kg**. Further, Yamamoto does not teach a method for compression molding poly(arylene ether), wherein the poly(arylene ether) has an **intrinsic viscosity of about 0.29 to about 0.48 dl/g, as measured in chloroform at 25°C**.

Since the combination of Umetsu and Yamamoto fails not teach all elements of the claimed invention, Applicants believe that a *prima facie* case of obviousness has not been made. Applicants respectfully request reconsideration and withdrawal of the rejection.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Response or otherwise, please charge them to Deposit Account No. 50-1131.

Respectfully submitted,

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